

REMARKS:Claims 1, 2, 8, 10, 12 and 16

Claims 1, 2, 8, 10, 12 and 16 have been rejected under 35 USC 102(b) as being anticipated by Arai et al. (US6320470).

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, the identical invention must be shown in as complete detail as contained in the claim. *Richardson v. Suzuki Motor Co.* 868 F.2d 1226, 1236, 9USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Each of claims 1, 2, 8, 10, 12 and 16 requires a Type Two phased locked loop configuration. Applying the rules of *Verdegaal Bros.*, *Richardson*, and *In re Bond*, Arai must likewise disclose a Type Two phased locked loop filter having the proper configuration, since that is what is claimed. However, Arai does not disclose a Type Two phase locked loop filter, nor the constituent elements arranged like a Type Two phased locked loop filter. Accordingly, the rejection of claims 1, 2, 8, 10, 12 and 16 violates the rule of *Verdegaal Bros.* for failing to teach a Type Two phased locked loop filter. The rejection of claims 1, 2, 8, 10, 12 and 16 also violates the rule of *Richardson* for failing to teach a Type Two phased locked loop filter having the claimed components. The rejection of claims 1, 2, 8, 10, 12 and 16 also violates the rule of *In re Bond* for failing to teach a Type Two phased locked loop filter having the claimed components arranged as required by the claims, i.e., as a Type Two phased locked loop filter. For any of these reasons, the rejection of claims 1, 2, 8, 10, 12 and 16 is improper and must be withdrawn. Reconsideration and allowance of claims 1, 2, 8, 10, 12 and 16 is respectfully requested.

Claims 1, 2, 8-11 and 13-15

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Claims 1, 2, 8-11 and 13-15 have been rejected under 35 USC 103(a) as being unpatentable over admitted prior art (APA), Fig. 1 in view of Nguyen et al. (US6437639).

The analysis of obviousness was set forth in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966). In order to establish a *prima facie* case of obviousness, three basic criteria must be met:

First, there must be some *suggestion or motivation*, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings of the references. Second, there must be a *reasonable expectation of success*. Finally, the prior art reference or combined references must teach or suggest *all the claim limitations*. *The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art*, and not based on applicant's disclosure (*In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991; emphasis added).

Applicant respectfully believes that the rejections of claims 1, 2, 8-11 and 13-15 is improper as failing the *Graham* test. Specifically, the rejection fails at least the first element of the *Graham* test for all claims, and at least the third element for some of the claims.

Regarding the first prong of the *Graham* test, that of motivation to combine the teachings, Applicant respectfully asserts that insufficient motivation has been presented to support a *prima facie* case of obviousness.

Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432. Claims 1, 2, 8-11 and 13-15 each require a passive capacitor part and an active resistor part. Nowhere does APA FIG. 1 suggest that an active resistor part would provide any benefit, absent the teachings of Applicant's disclosure. Likewise, Nguyen merely discloses a very complex filter in FIG. 7 that happens to include transistors. Nguyen indicates that the benefit of the transistors is that they function as switches, thereby eliminating the need for separate switches and

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resistors as in FIG. 6. However, the transistors provide a static resistance, just like the passive resistors of FIG. 6, where the overall resistance is controlled by which switches (FIG. 6) or which resistors (FIG. 7) are closed. Thus, aside from providing an integral switching function, Nguyen does not indicate that transistors are preferable to resistors. Rather, they perform the same function. Accordingly, it cannot be said that either reference adequately suggests the proposed modification of APA with Nguyen's transistor.

Further, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Again, APA does not suggest that an active resistor part would provide any benefit, absent the teachings of Applicant's disclosure. Nor does Nguyen teach or suggest that his transistor would be preferable to a passive resistor in the Type Two filter shown in APA. Nguyen discloses both passive resistors (FIG. 6) and transistors (FIG. 7) as essentially providing the same static resistance value, that of providing a static resistance based on which switches are opened or closed. Thus, no advantage as far as being able to adjust the resistance value is disclosed in either reference. In fact, Nguyen requires an array of resistors/switches to provide an adjustable resistance. Second, the Type Two filter of APA does not require an integral switching function, and so the only disclosed advantage of transistors over resistors does not apply. Therefore, it cannot be said that the prior art suggests the desirability of the combination.

Nor has the Examiner provided a reasonable motivation based on knowledge generally available to those skilled in the art and not provided by Applicant in the present disclosure.

"To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the

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references." Ex parte Clapp, 227 USPQ 972, 973 (Bd.Pat.App.&Inter.1985).

Here, the Examiner has indicated that the motivation to combine the references is based on reducing circuit size. However, Nguyen indicates that the passive resistor-only embodiment provides three basic advantages: small size, self-bias and symmetry. See Nguyen col. 4, lines 65-67. Accordingly, Nguyen appears to indicate that passive resistors are preferred where small size is desired. Accordingly, it cannot be said that one skilled in the art would have been motivated to modify APA as suggested in the rejection. The only conclusion that can be drawn is that the modification proposed in the rejection has been impermissibly drawn from Applicant's disclosure. Therefore, the rejection fails the first prong of the *Graham* test.

Because the *Graham* test is not met for any of the foregoing reasons, allowance of claim 1 is respectfully requested.

Claims 2, 8 and 13-15 depend from claim 1, and are therefore also believed to be allowable over the combination proposed. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Claim 11 depends from claim 10, and is therefore also believed to be allowable over the combination proposed.

Applicant also respectfully asserts that the rejection fails the third prong of the *Graham* test at least with respect to some of the claims. Regarding the third element of the *Graham* test, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). See MPEP 2143.03.

Claim 2 has been further amended to require that the active resistor part has a

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continuously adjustable resistance. New claims 19 and 20 also require this feature. This feature is not found in APA or Nguyen. Rather, as discussed above, Nguyen's transistors provide a static resistance value, rather than a continuously adjustable resistance value. Accordingly, the prior art fails to teach or suggest the limitations found in claim 2, as amended.

Claims 4-7

Applicant acknowledges and appreciates allowance of claims 4-7.

Claims 3, 17 and 18


Applicant acknowledges and appreciates indication of allowable subject matter in claims 3, 17 and 18.

Claims 19-20

New claims 19-20 have been added to vary the scope and further define the present invention. These claims are fully supported in the present application and figures.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 971-2573. For payment of any additional fees due in connection with the filing of this paper, the Commissioner is authorized to charge such fees to Deposit Account No. 09-0466 (Order No. GB920020058US1).

Respectfully submitted,

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